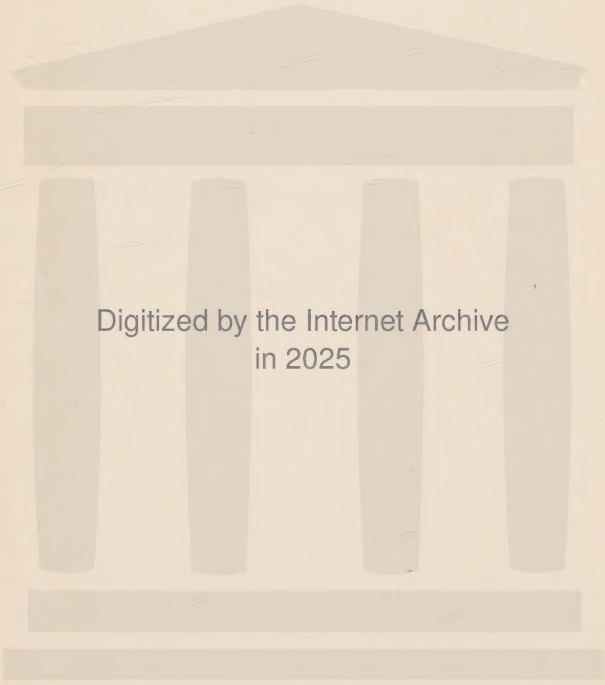
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THE JOHN CALVIN McNAIR LECTURES

SCIENCE AND RELIGION TODAY

THE JOHN CALVIN McNAIR LECTURES

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SCIENCE AND RELIGION TODAY

BY

THORNTON WHALING, D.D., LL.D., LITT.D.

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AND ETHICS IN THE LOUISVILLE
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To the memory
of that peerless scholar and saint

JAMES WOODROW

a scientist and a "man of God"
who was above all a masterly expounder
of the right relations between
science and religion

THE McNAIR LECTURES

The John Calvin McNair Lectures were founded through a bequest made by Rev. John Calvin McNair, of the class of 1849. This bequest became available to the University in 1906. The extract from the will referring to the foundation is as follows:

"As soon as the interest accruing thereon shall by said Trustees be deemed sufficient they shall employ some able scientific gentleman to deliver before the students then in attendance at said University, a course of lectures, the object of which lectures shall be to show the mutual bearing of science and theology upon each other, and to prove the existence of attributes (as far as may be) of God from nature. The lectures, which must be prepared by a member of some one of the evangelic denominations of Christians, must be published within twelve months after delivery, either in pamphlet or book form."

PREFACE

IN preparing and delivering these lectures my chief difficulty lay in finding an exact definition of science, which would represent unvarying usage throughout the entire course. By way of illustration, James Woodrow tells us, "The Bible does not teach science; and to take its language in a scientific sense is grossly to pervert its meaning." Here it is evident that the gifted and cautious writer has in mind exclusively natural or physical science, for he was a renowned advocate of the inspiration of Scripture in the realms of such sciences as ethics, religion, and theology. In some true sense he would affirm that a science of reality and truth as contained in the fields of morals and religion was possible on the basis of the Revealed Word of God.

On the other hand, quite a distinguished theologian of the present day, J. Gresham Machen, informs us in his book, *Christianity and Liberalism*, that "our principal concern just now is to show that the liberal attempt at

reconciling Christianity with modern science has really relinquished everything distinctive of Christianity." Here the author is using the term science in a far wider sense than that of natural science only, and includes under the name of science the professedly rational and convincing treatment of reality which is furnished by history, ethics, psychology, philosophy, and theology, under the names of historical, ethical, psychological, philosophical, and theological sciences.

I would not play the part of a cowardly pacifist, who "cries peace, peace, when there is no peace," but James Woodrow and J. Gresham Machen are absolutely agreed as to what they really mean. Neither wears an orthodoxy which the other refuses.

The McNair lecturer for 1928 hereby proclaims that his fundamental thesis is the substantial agreement of true scientists like Newton, Agassiz, and Woodrow and real theologians like Warfield, Patton, and Machen. The time has come to recognize that true science and real religion must be forever marked by

the "harmony of non-contradiction." We all need to learn how to use that striking, impressive, and meaningful word—science.

The scholarly young preacher who endowed the McNair lectures knew this full well, and expected a demonstration that all the divine attributes and perfections are proved and illustrated by the living and rational coöperation of all the sciences, natural, psychological, ethical, philosophical, and theological. The cosmos, thus rationalized by the universal science, is the proof of the existence and character of a First Cause worthy of faith and wise coöperation.

I have written and published much on the subject of Science and Religion, but nothing which does not appear for the first time in these pages save a few statements in Chapter I, which I have received full permission to use.

THORNTON WHALING

Louisville, Kentucky
January, 1929

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SCIENCE AND RELIGION TODAY

INTRODUCTION

I AM conscious of a sense of satisfaction in filling the McNair Lectureship at the University of North Carolina in this year of grace 1927 to 1928, because of some peculiarly personal considerations. The founder of the Lectureship is a graduate of the Theological Seminary at which I also was graduated and of which I was the President from 1911 to 1921. This institution has the distinction of being the first theological school in our country, and, so far as I can discover, in the world, to establish a chair exclusively on the relations of religion and science. About seventy-five years ago a distinguished Mississippi jurist endowed a professorship in the Columbia Seminary to teach the true relations between these two great realms of human interest, and in his honor it was named The Perkins Professorship of Science and Religion.

The first professor was James Woodrow, who, as a recognized specialist both in science and religion, taught this great subject for

twenty-five years with masterly skill and success.

Unfortunately the controversy as to evolution, which divided the world of scholarship fifty years, led to his removal from this Perkins Professorship in 1886. Twenty-five years afterwards, in 1911, I was called to the presidency of this Seminary and asked by the Board to fill the Perkins Chair, which I did in connection with theology for ten years. I am therefore venturing into no new field in these McNair lectures, responsibility for which I take pleasure in loading upon your magnanimous Board of Trustees, but for whose contents I alone am accountable.

I recognize that a variety of themes have been treated from a variety of angles by the distinguished scientists, littérateurs, and scholars who have in the past filled this lectureship. I accept your invitation to serve you in this way, believing that in the true university spirit, you wish this great theme of science and religion to be presented from the standpoint of an orthodox theologian who makes

no secret of the fact that he is an undisguised Augustinian and Calvinist. But I also believe that true progress in this field is built on that scholarly interpretation of the Revelation in the Scriptures which correctly integrates its teachings into organic unity and rational system.

Modern interpretations, sometimes parading with loud insistence upon their modernness, are really venerable antiquities and anachronisms which went into eclipse a thousand or more years ago. For example, the neo-Hegelianism of Schleiermacher, Royce, and Professor Fosdick is in essence the neo-Platonism of Porphyry and Celsus, only wearing, of course, patent leather shoes instead of Greek sandals. I have a standing offer of a thousand dollars in gold to any man who will show me a brand new heresy in either philosophy or theology.

If there is any place in the world where the perfect candor and frankness which disdains all stratagem and disguise ought to reign, the university is that hallowed center of pure

thinking and straightforward pronouncement. And so I invite you, venerable and renowned scholars and ambitious youthful disciples of reason alike, to weigh my lectures in the scales justly and in the light of the highest reason; and let each man determine for himself what he ought to conclude and believe. The only thing I promise is to give you as plainly and succinctly as I can the result of fifty years of study and reflection under some of the ablest teachers of both the old and the new world.

And so to my task.

I

THE RIGHTS OF SCIENCE

THE conflict between religion and natural science is as old as human thought. It has, however, reached its most acute stage in the last hundred years, and its climax, perhaps (or so let us hope), in the last decade. This conflict should excite no surprise, because divergence of view and various schools of opinion mark human activity in every realm. In philosophy there are four or five supreme types, each one of which has contending varieties claiming best to represent the type. An interesting symposium[1] has recently appeared dealing with the "psychologies of 1925," which are treated under six heads—Behaviorism, Dynamic Psychology, Gestalt Psychology, Purposive Psychology, Reaction Psychology, and Structural Psychology; and there are still others which have escaped the learned authors' attention.

[1] *Psychologies of 1925*, "The International University Series," ed. Carl Murchison (Worcester, Mass.: Clark University Press, 1926), pp 7-8.

In natural science itself unanimity exists in less degree than some seem to be aware. Professor Eddington of the University of Cambridge tells us that "on the present relativity theory we have the truth in a purer form than in the Newtonian theory which preceded it, even as the Newtonian theory was a great advance over the conception that preceded it."[2] He then adds: "Advanced deductions from the theory may not have secured the same wide acceptance among scientific men as the better known portions of the theory." And so it goes, disputes and contending opinions everywhere, in economics, sociology, psychology, ethics, philosophy, theology, and even in the wondrous and imperial realm of natural science.

All possible emphasis, however, ought to be placed on the statement that the conflict between natural science and religion is more properly described as a contention between some representatives of natural science and some representatives of religion, for their

[2] In *Science, Religion and Reality*, ed. Joseph Needham (New York: The Macmillan Company, 1925), p. 194.

spheres are so different that there can no more be war between natural science and religion than between the multiplication table and the ten commandments, or between the theory of logarithms and the faultless poetical rhythms of Homer or Shakespeare.

1. Delimitation of the Field of Natural Science

The first right of natural science is the definition and delimitation of its proper field and bounds.. In the words of Sir Arthur Thomson, "Science [by which he means natural science] is a system of knowledge built up on a basis of observation and experiment and compacted by reflection on the data thus supplied. Scientific knowledge is typically of such a kind that it can be verified by competent inquirers who repeat the observation and experiment and make them the subject of careful independent reflection. Science is a verifiable, communicable, impersonal, unemotional knowledge. . . . The Laws of Nature are man's descriptive formulae of

uniformities of sequence which enable him to say, 'If this, then that.' "[3] Of course physical science is here described by a competent master and specialist, and knowledge is certainly reached by this mode in the vast imperial field of natural science.

But there is more than one valid mode of cognition, as Canon Streeter of Oxford University so ably argues in his treatise on "Reality." In his chapter on "Two Ways of Knowledge" he defines science as consisting of classification, analysis, and explanation; he holds that "the method of science is to take the individual concrete thing and (a) assign it to a class, (b) to split it up into its component parts, (c) to see everything about it as a particular instance of some universal law. . . . But what if there be anywhere anything that either (a) has some element of uniqueness which eludes classification, or (b) has in it something which defies analysis, something which completely disappears when

[3] *The Outline of Science* (New York: G. P. Putnam's Sons, 1922), IV, 1165.

analysis begins, or (c) behaves in a way which cannot plausibly be described as merely one instance of a mode of action in accordance with some universal law?"[4] There are everywhere, according to this Oxford professor, things or entities which defy classification, abhor analysis, or veto explanation according to the methods of natural science.

He argues that in psychology and religion both there are methods of reaching knowledge both of self and of God which are just as valid and rational as, though in the nature of the case different from, the method of physical science. Psychology involves an immediate self-consciousness which eludes physical classification, analysis, or explanation. Religion involves a knowledge not only of a Personal Self, but of an infinite Personal Not-Self, incarnating all moral and spiritual values. This knowledge is realized as the result of an immediate and vital experience which can have solution *only* on the basis of the "reality" of this supreme personality or

[4] B. H. Streeter, *Reality* (New York: The Macmillan Company, 1926), p. 81.

infinite life-force. History testifies that with rare exceptions all men claim to have this knowledge, and demonstrates that a normal man is as naturally religious as he is scientific.

The fields of natural science and religion are thus distinct and exclusive, and there can be no real contradiction between them. Religion deals with moral, spiritual, and religious truth, while physical science describes the external and material universe by mathematical measurement as expressed in uniform laws. Unfortunately their disparate realms have not always had universal recognition. Past ecclesiastical objections to astronomy, geology, and some biological teachings, have been based on wrong interpretations of the inspired Scriptures, which in no sense are designed to teach physical science, but which occupy the far loftier realm of ethical and religious truth relating to God, duty, and the supreme values of life and destiny. It is to be deplored that even today, despite all the enlightenment of the modern age, there remain some combative disputants who still affirm that

the fields of religion and physical science overlap in certain mutual territories.

The brilliant Dean of Saint Paul's, Dr. Inge, is anxious to find a *modus vivendi* between religion and science and informs the listening world that he has "rejected with decision that kind of agreement which rests on a delimitation of territory. Some recent writers have said that 'there can be no conflict between religion and science because they never meet. They move on different planes.' . . . To acknowledge such distinctions and rest an agreement upon them, assigning all on one side of the line to science and all on the other side to religion, is at best a proposal for armistice: it can lead to no permanent peace. A religion which does not touch science and a science which does not touch religion are mutilated and barren. Not that religion can ever be a science or science a religion: but we may hope for a time when the science of a religious man will be scientific and the religion of a scientific man religious."[5]

[5] W. R. Inge, in *Science, Religion and Reality*, ed. Joseph Needham (New York: The Macmillan Company, 1925), p. 348.

Of course it goes without saying that the science of a religious man ought to be scientific and that all scientific men ought to be religious. All colleges and universities ought to have true physical science taught by competent scientists, but it is a fine example of provincial parochialism to insist that the field of physical science is co-extensive with human knowledge. There are other modes of valid knowledge. Physical science knows by experimentation and observation; historical science knows through credible testimony; psychology, by immediate consciousness of freedom and personality; philosophy, through the universal laws of pure reason or thought; religion, by the answer of the infinite Personality to the call of moral and spiritual need. And to claim that knowledge belongs alone to any one of these fields is to ignore the breadth of possible knowledge and the high endowments of human nature, through a certain concealed Pharisaism which is the essence of conceit and obscurantism. For natural science, history, psychology, ethics, philosophy, or religion to

affirm that there is only one mode of cognition, and that way its own, is to betray a fatuous pride which convicts of lack of real culture in the court of right reason.

2. The Authority of Science in its Own Field

The second right of natural science is the recognition that in its own proper field it is undoubted master and that its teachings are determined solely by its own methods and canons. Neither philosophy nor religion has any right to challenge the teachings of natural science upon any other ground than its failure to support such teachings by proper and convincing scientific proof. Some great philosophers and wise theologians have erred at this point—Luther called Copernicus a fool and an "upstart astrologer"; Melanchthon thought that those who set forth such theories as the Copernican astronomy had no "sense of decency"; and even the consummate citizen and statesman in the kingdom of reason, John Calvin, asked: "Who will venture to place the au-

thority of Copernicus above that of Holy Scripture?" He reduced to a minimum the scientific deliverances of the Scriptures, as the study of his *Institutes of Theology* will show, but he erred in this particular instance in regarding the geocentric theory of the cosmos as built into the texture of the inspired Word.

This mistake is one that blemishes the history of the past in too many cases and is due to the belief that "the Bible does teach natural science both directly and indirectly and that those who do not believe the science which is there supposed to be found are infidels. It has been shown so very often in the past that the Bible was not teaching science when it was supposed to be doing so that a presumption in the same direction would seem to be raised, so strong that we ought to act upon it." [6]

The convincing testimony of history, combined with the growing scholarship of the soundest thinkers, rests on the sane foundation

---

[6] *Dr. James Woodrow as Seen by His Friends*, ed. Marion W. Woodrow (Columbia, S. C.: R. L. Bryan Company, 1909), pp. 654-55.

that physical science interpreting nature and biblical science interpreting revelation belong to realms so different that each is master in its own realm and that each of these is estopped from seeking to enslave the other by insisting that the interpretations of either shall rule the other. Physical science has no arbiter to which to submit its findings save its own canons of proof by observation and experiment; and all other departments of knowledge including psychology, philosophy, and religion ought to recognize without debate or quibbling this undoubted right.

3. The Discoveries of Natural Science

The third right of natural science is the recognition of the wonderful discoveries by which in comparatively recent years, it has really transfigured our view of the cosmos. How small was the universe of Moses, Paul, Augustine, or Calvin compared with the universe as known today, which defies the boldest imagination in its extent, age, and complexity. Professor Thomson informs us that "our sun

is in a more or less central region of the universe, or a few hundred trillion miles from the center. It is now known that the more distant stars of the Milky Way are at least a hundred thousand trillion miles away from the sun. The immensity of the Stellar Universe, as we thus see, is beyond our apprehension. The sun is nothing more than an ordinary star, perhaps an insignificant one. There are stars enormously greater than the sun. One such, Betelgeuse, has recently been measured, and its diameter is more than three hundred times that of the sun. The proof of the similarity between our sun and the stars has come to us through the spectroscope. The elements that we find by its means in the sun are also found in the same way in the stars. Matter, says the spectroscope, is essentially the same everywhere in the earth and the sun, in the comet that visits us once in a thousand years, in the star whose distance is incalculable, and in the great clouds of 'fire mist' that we call nebulae."[7] The unity and yet the vast-

[7] *Op. cit.*, I, 14, 37.

ness of our cosmos awaken and arouse every mind capable of thought and raise questions which natural science alone cannot answer.

Geology extends the dimensions of time as astronomy extends those of space, and millions and trillions of years are as easily conceded as millions and trillions of miles. The age of the cosmos is as incalculable as its extent, if the findings of geology have scientific value. There is no reason why historian, philosopher, or theologian should begrudge conceding all the time which the geological ages seem to require. There is plenty of time and plenty of space to meet all the needs of any science, and illiberality here is simply irrational.

The complexity of the universe has received wondrous confirmation in the abolition of the old-fashioned atoms and molecules of Faraday and Agassiz, and in the discovery of electrons and protons through the spectroscope, x-ray, and radio-activity. Bertrand Russell in his charming book *The A B C of Atoms* says: "An atom is a kind of solar system consisting of a nucleus which has electrons revolving

around it. The physicists have now all but succeeded in reducing matter to two different kinds of units, one (the proton or hydrogen nucleus) being positive electricity and the other (the electron) being negative electricity. It will help us to picture the world of atoms if we have to begin with some idea of the size of these units. Let us start with a gramme of hydrogen—about one four hundred and fifty-third of a pound. How many atoms will it contain? If the atoms were made up into bundles of a million million and then we look upon a million million of these bundles, we should have about a gramme and a half of hydrogen. That is to say, the weight of one atom of hydrogen is about a million millionth of a gramme and a half."[8]

It is true, that this same Bertrand Russell in another book declares, "Electrons and protons like the soul are logical fictions."[9] It may well be that modern science is on the

[8] *The ABC of Atoms* (New York: E. P. Dutton and Company, 1923), pp. 3, 5.

[9] *What I Believe* (New York: E. P. Dutton and Company, 1925), p. 17.

road to proving that as space and time are boundless, so also limitless divisibility into the infinitesimal and the still more infinitesimal as we go down the scale, marks the cosmos in which we live. Dr. B. B. Warfield used to have an aphorism to the effect that the divine method in every sphere was the method of infinitesimals: all things great being composed of many little things. Some things can grow bigger and bigger forever, and others smaller and smaller forever, there being no limits to divisibility. Aristotle two thousand years ago affirmed his belief in the infinite divisibility of matter. It looks as if physical science were getting ready to confirm his opinions.

In all these ways natural science gives us a wonderful universe which far transcends in dignity and worth the cosmos which confronted the gaze of the centuries behind us.

4. The Frank Disclosures of Natural Science

The fourth right of natural science is endorsement of its condemnation of the shallow

optimism that calls all nature good. The results of physical science are of a piece with the constitution of the cosmos itself. The mechanization of commerce has created hard problems in industry, economics, and international life which natural science cannot solve alone and unaided by all the other sciences. It emphasizes the point which natural science itself reveals, that there are dark shadows upon the face of our world. Pain accompanies all life, and death reigns with undisputed sceptre. Germs of disease are everywhere, a part of the very structure of nature. Heart disease, Bright's disease, diabetes, cancer, degenerative diseases of the arteries, liver, and central organs are all here to stay. Functional neuroses, neurasthenia, hysteria, epilepsy, insanity are equally in evidence. As John Burroughs so often said, "the whole animal world is forever frightened by the foes pursuing and ever pursuing." The "sins and inadequacies of nature," in the phrase of a recent brilliant writer, are part of the dis-

closure of the best of modern science. Tennyson's poetic vision saw this:

> Are God and Nature then at strife,
> That Nature lends such such evil dreams?
> So careful of the type she seems,
> So careless of the single life;
>
> . . . . . .
>
> "So careful of the type?" But no.
> From scarped cliff and quarried stone
> She cries, "A thousand types are gone:
> I care for nothing, all shall go.
>
> "Thou makest thine appeal to me:
> I bring to life, I bring to death:
> The spirit does but mean the breath:
> I know no more." . . .

Darwin's striking terms, the "struggle for existence" and "survival of the fittest," describe features of this strange and wonderful universe by which we all find ourselves environed, and in whose character and texture all of us have so profound an interest. There is a scientific revelation of nature in the visit to the operating room of a great hospital, where malignant diseases stare one in the face, as

well as in the spectroscope which proclaims the make-up of the stars, or in radio-activity which discloses the structure of the atom.

5. Science's Right to Refuse Certain Problems

The final right of natural science is to decline the attempt to solve the problems of other sciences or departments of knowledge. This attempt is sometimes made by scientists themselves, but oftener by representatives of other fields seeking to support their views by forcing natural science to speak. For example, historical science alone can answer by competent and credible testimony questions relating to events in the past. Physical science cannot settle disputes as to the character of Washington or Jefferson, as to the authorship of *Ecce Homo* or the *Vestiges of Creation,* as to claims of either Mohammed or Jesus: all these must appeal to the court of historical science upon the basis of sufficient and satisfactory evidence.

Nor, again, can physical science be forced to answer the questions which philosophy must

seek to solve as to the efficient cause and final purpose of the universe. Natural science deals by observation and experiment with processes and uniform laws. Philosophy inquires for the efficient cause and final purpose. Yet philosophers of renown are guilty of the obscurantism of seeking through physical science to solve their own peculiar problems, and in so doing they condemn their own systems as based on other than sound philosophic grounds. Professor Perry of Harvard tells us that "If we conceive the sciences to form an order from physics through biology to logic, ethics and aesthetics, the so-called normative sciences, we may say that naturalism reduces all to physics, spiritualism (or idealism) to the normative sciences, while the third view (vitalism) reduces both ends to the middle or conceives both physics and the normative sciences as biology."[10] Naturalism builds on physics, spiritualism on logic, ethics, and aesthetics; vitalism, voluntarism, or pragmatism on biology, according to the learned

[10] Ralph Barton Perry, *Philosophy of the Recent Past* (New York: Charles Scribner's Sons, 1926), p. 168.

professor, who correctly diagnoses the case; and they are all vitiated by this patent fact. Yet he informs us: "There is nothing new or philosophically significant in the continuing progress of scientific discovery or in the increasing utility of its technological applications. . . . Nor is there anything radically new in the continuous refinement of the mathematical and physical instruments of research, unless it be a growing recognition of the extent to which the results of science depend on technic and may therefore be regarded as in Poincare's sense 'conventional'." [11]

I think the time has come when the physical scientists themselves should demand that philosophers cease invading their field and by violence distorting scientific teachings into apparent support of a philosophy which has no real basis whatever in the pure science of the scientific specialist. The truths of science are betrayed, the rights of science are violated, when loud and

[11] *Ibid.*, p. 76.

insistent proclamation is made by the clamorous philosophers that they are speaking in the name of nature and of science. The natural scientist, as such, is neither materialist nor naturalist, idealist nor spiritualist, vitalist nor voluntarist nor pragmatist, and he ought to ask with strenuous insistence that philosophers cease this learned and classic impertinence and henceforth keep to their own territory while allowing the scientist to cultivate his own field unharassed by the intrusion of those who illicitly borrow his treasures to use as they were never intended.

Thus the rights of natural science are clearly seen: first, the right to the careful delimitation of its own field; second, the recognition of its unquestioned mastery of its own realm; third, due tribute paid to its splendid services in transforming the modern view of the universe; fourth, its frank disclosure of the dark shadows on the face of nature; and fifth, and perhaps most important of all, its right to decline an attempt to answer certain questions which psychology, ethics, philosophy, and re-

ligion must each ask and each answer by investigating reality in its own realm according to its own peculiar and valid methods.

I am neither a "prophet nor the son of a prophet" but I venture to predict that with the rising of tomorrow's sun the day will have come when all the sciences—natural, psychological, ethical, philosophical, and religious—will gladly coöperate in the recognition by each, of the rights of all the others; when none of them will attempt to function in the disguise of any other; and when all will accept the results of the valid findings of every other science. The cosmos, wonderful and vast as we know it to be, will wear a still more glorious aspect when the light which shines from all the provinces of reality is focused into the unity of a world view vouched for by philosophy, ethics, and religion, as well as by natural science. God speed the coming of that day!

II

THE RELATIONS OF SCIENCE AND PHILOSOPHY

ALL men are philosophers, morons and idiots excepted. Some may not be aware of the fact, but it is inevitable and natural to hold some theory of the universe. These philosophies are quite varied, but there are some types which have been found in every age and every race in the history of mankind. A man's philosophy is the most fundamental and determinative of all his beliefs. Sometimes, yea often, the individual lives in blissful ignorance or in emphatic denial of his holding any philosophical system. The deepest human characteristics reside in the unconscious realm. For example, the agnostic claims that he holds no theory of the cosmos; that he is without knowledge of its cause or purpose. However, he is not a complete agnostic for he claims to know that he

knows nothing, and that is knowing much. A man must be a master psychologist to be really sure that he knows nothing. Socrates explained that the oracle declared him to be the wisest of men because he alone knew that he knew nothing. Paul pungently declares if a man thinks he knows anything (perfectly) he knows nothing yet as a man ought to know. The boundaries of knowledge are small; the universe of ignorance is infinite.

Herbert Spencer, chief protagonist of the agnostic type, affirmed that all he knew as a philosopher was that "Force is and Force is persistent." If asked whether force is personal or impersonal his answer is "Impersonal," and at once his philosophy is evident. Though an agnostic, he claimed to know that impersonal force, always existent and ever at work, is the first cause of all the entities, processes, and events in the history of the universe. Many philosophies claim to know no more than is found in this Spencerian system of agnosticism.

While independent and occupying different spheres, religion and natural science have close relations, just as Great Britain and the United States, though independent nationalities, still find commodities overleaping high tariff walls and their citizens passing freely from one nation to the other; interrelationship is perfectly consistent with independence the world over. In the case of religion and science, their mutual relations are illuminating and determinative of wise strategy and policy in fixing their attitudes toward each other. Neither prospers as it ought without just and wise interconnections founded on reality as affecting both.

1. Mutual Relations of Science and Philosophy

Philosophy, with psychology and logic as partners, furnishes the foundations on which physical science is based: (1) The validity of normal sense-perceptions is the teaching of psychology; (2) the binding force of sound induction is vouched for by logic in its laws

of thought; (3) the uniformity of nature in the past, present, and future, through all its vast extent, has no foundation other than philosophical, yet necessary, conviction.

On the other hand, natural science stimulates philosophy, which cannot refrain from the subtle and profound influence of manifold scientific discoveries and teachings. A universe as wonderful in the vast space it occupies, in the immeasurable time it has existed, in the ever-increasing complexity which marks its processes, in the strange and baffling struggles which apparently fetter its evolution, must have a Cause adequate and commensurate with its imperial, cosmical dimensions and characteristics. Natural science enlarges our conceptions of the power and attributes of the Being who is the cause of the vast and imperial cosmos, as we now know it.

Philosophy, while recognizing natural science, cannot ignore the science of psychology, which delivers by immediate knowledge the facts of freedom and personality. Nature, controlled by necessary law and physi-

cal continuity, is contrasted with the human being or personality clothed with freedom and self-sovereignty. The necessities of controversial disputation may make a learned debater sometimes assume doubt here, but the testimony of his own consciousness to his free personality is ever with him. The universe is composed, not only of material entities or beings, by whatever name you choose to call them, controlled by mechanism or necessary law, but is also composed of personalities whose self-determination or freedom is recognized by intimate consciousness, as well as by legal enactments in every land and race.

Philosophy also employs the science of ethics, or moral science, which recognizes the unique idea of the right, incapable of analysis into utility or any other form of mental relation or content. Our cosmos thus contains physical entities, free personalities, and the idea of the right—indissolubly bound together with all human activity and even held by some as marking the processes and laws of physical nature. The "categorical imperative" of

Kant cannot be divorced from that entity we call mind. "Thou shalt" and "Thou shalt not," proclaimed by some power within and ever annexed to some power without, is a phenomenon which thought and reason cannot evade. Moral values are as truly universal mental content as are sense-perception, the idea of self, or the cognition of will-power as exercised by a unique agent.

The supreme question which philosophy confronts is to account for the origin and the purpose of a universe as vast and complex as that which natural science and all the other sciences now disclose; embracing not only stars and atoms but free personalities as well, who are forced to admit the binding force of that idea of the right which plays so supreme a part in human character and history. We have not explained the origin of the cosmos until we have found the cause which accounts not only for natural laws and forces but also for free personalities and, above all, for that dominant idea of right or righteousness which

represents the highest, the supreme value in life.

It would be the narrowest kind of mean provincialism for either psychology, ethics, or natural science to affirm that the only real universe that existed was the one that it revealed, and to insist on binding philosophy as a slave to its own exclusive field or territory. This policy is sometimes pursued in the name of natural science and sometimes in the name of psychology, and it ought to receive emphatic veto and repudiation by consistent and loyal, but instructed and broad-visioned natural scientists and psychologists. There is no method of concealing the fact of the claim current in certain circles that physical science offers the only mode of knowledge of the world in which we live, while all other sciences, such as psychology, epistemology, history, and theology are barren deserts of dead and unwarranted dogmatisms. Such a proud claim is an unequaled example of the purulent Pharisaism and insolent provincialism which sometimes infest seats of learning where its

existence could scarce be expected. I speak of educational institutions far, far away.

Our cosmos is far vaster than any one department of knowledge can disclose, and physics, astronomy, biology, psychology, ethics, chemistry, and history must all combine to show its amplitude and many-sidedness in any true philosophy. If not, the philosophy which endeavors to unify the whole by seeking the efficient and final cause of it all, will be distorted and twisted into the destructive narrowness marking those philosophic systems which decline to be based on the universe as a whole. No philosophy is adequate which declines to build on all the sciences, or which with blinking blindness refuses to see reality in all the forms in which it is known by human cognitive powers. Natural science is an invaluable aid in this as in other fields, and the wonders of modern science as a stimulus to true philosophic thought can scarce be exaggerated; but why psychological, ethical, and historical sciences should be relegated to the limbo of exploded anachronisms cannot be

demonstrated so long as consciousness testifies to freedom, ethics to the supreme value of righteousness, and history to many certitudes based on human testimony. Our universe embraces not only atoms composing matter, whatever that may be, but also entities marked by mind, whatever that may be; historic figures like Caesar, Paul, Washington, and Lincoln move across the world, and all these, and much more, must be taken into account by a broad-visioned philosophy which does not fasten its gaze upon one section of the vast cosmos, but looks with open eye upon the whole and bases its conclusion upon deliverances from every known and knowable portion of the universe. The vice which marks quite a number of current philosophies is that of narrowness, which I ask to be allowed to call Pharisaic parochialism or purulent provincialism.

2. Some Provincial Philosophies

Let us take a glance at some representative modern specimens of these false systems.

Naturalism, which is in essence the old-fashioned and aged materialism, first attracts attention by its boastful claims. I will give Professor Perry of Harvard the task of defining this system: "By Naturalism is meant the philosophical generalization of science—the application of the theories of science to the problems of philosophy. Both philosophy and science have, as we have seen, a permanent and institutional character. Each has its own traditions, its own classic authorities, and its own devotees. But Naturalism proposes to make the institution of science serve also as the institution of philosophy. . . . The scientist proper, the man of special research, becomes a materialistic philosopher only when he acts in a new capacity. As scientist in the strict sense, he is noncommittal with reference to philosophical problems. . . . But a scientist is also a man and hence may readily become a philosopher as well. . . . The principal source of naturalism lies in this disposition of scientists, not infrequently men of weight, to assume the rôle of philosophy and

to carry with them into the forum of philosophy the traditions and hypotheses with which they are already familiar."[1] Again Professor Perry says, "Naturalism as we have seen, is not science, but an assertion about science. More especially it is the assertion that scientific knowledge is final, leaving no room for extra-scientific or philosophical knowledge."[2]

It may be well to let the professor give brief and convincing demolition of the hypothesis which underlies this system. He says, "Matter is too well known in its private capacity to play becomingly the part of Universal Being."[3] And further, "without prejudice to the truth of science or to the validity of its methods, without disparagement to the reality of our physical natures, it is still open to us to conclude that science is not all of truth, nor physical nature all of being. . . . Analysis shows that physical science presupposes logic and mathematics; or that physical reality

[1] Ralph Barton Perry, *Present Philosophical Tendencies* (New York: Charles Scribner's Sons, 1912), pp. 45-46.
[2] *Ibid.*, p. 63. [3] *Ibid.*, p. 69.

is complex and decomposable into more simple terms and relations. Logic is prior to physics in the sense that it has to do with more elementary forms of being, and ethics is at least correlative with physics, since what it describes is as truly found in the world as that which physics describes. And logic and ethics taken together with other equally unimpeachable branches of philosophy, not only disprove the generalization of naturalism, but afford a basis for religious beliefs."[4] The learned professor therefore justly impeaches naturalism of the unpardonable logical sin of an insufficient and fractional induction, since reality in the cosmos is far wider than the narrow system admits. A philosophy which thinks only of physical entity is too narrow for real respectability.

Idealism next floats before our view with its affirmation of the priority of the cognitive consciousness and its cardinal principle that being is dependent on knowing. It has various subtle and elusive forms, but all of them are

[4] *Ibid.*, pp. 108-9.

built on the platform that nothing exists save as it is known: its *esse* is *percipi*—thought and being or reality are one and identical. Of course it is easy to inquire if thought does not involve a thinker who exists prior to the thought. But sufficient answer is given by another gifted Harvard professor who writes, "Our experience, so far as it is primarily concerned with our direct recognition of a solid world of other things which are actual in the same sense that we are actual, has three main independent modes each contributing its share of components to our individual rise into one concrete moment of human experience. Two of these modes of experience I call perceptive and the third I will call the mode of conceptual analysis. In respect to pure perception I call one of the two types concerned the mode of 'presentational immediacy' and the other the mode of 'causal efficiency.' Both 'presentational immediacy' and 'causal efficiency' introduce into human experience components which are again analysable into actual beings of the actual world and into abstract attributes,

qualities, and relations which express how those other actual things contribute themselves as components to our individual experience."[5] Presentational immediacy puts an actual thing into contact with us and causal efficiency shows an actual thing as doing something to us. If we know at all, we all know both of these statements to be true whether we are scientists, philosophers, professors, Ph.D.'s, or plain apostles of common sense. And this idealism is guilty of the same vice which vitiated naturalism, though in the opposite direction. While naturalism ignores logic, psychology, and ethics, idealism ignores physics and biology and the fixed order of the natural world working independently of human experience. And provincial parochialism again intrudes its nauseous and distressing presence.

Time forbids that I should examine other current philosophies in any detail, as for example pantheism, showing that it really ignores the universe altogether in any true

[5]Alfred North Whitehead, *Symbolism: Its Meaning and Effect* (New York: The Macmillan Company, 1927), p. 17.

sense and is thus a hypothesis suspended in mid-air upon imaginary piers and therefore incapable of demonstration. There is no more certain knowledge that any man ever attains than is described in the self-consciousness which affirms, "I am I," "I am not you," "I am not God." If I am God or you are God, I am sorry for Him and I am profoundly sorry for a universe that has such a God. It cannot be, for I know "I am I" and I am nothing else but "I," and by analogy I conclude that "You are you" and nothing but "you," and that is surely enough.

Another type, called vitalism, is guilty of the vice of founding philosophy exclusively upon biology, as if life were the only entity, and is therefore to be condemned for the same widely prevalent narrowness and parochialism. This vitalism is the archaic hylozoism which affirms that everything is alive, rocks and ocean and world, as well as flowers, birds and lions. It is no more scientific or philosophic than the animism which marks the savage in Africa or Australia who regards the rock

against which he stumps his toe as alive, whereupon he vents his rage by attacking it. Life is much, and biology a noble science, but there is much more in reality.

Once more, neo-realism is a compound of naturalism and realism and is guilty of claiming that we know by "presentational immediacy" only physical entity and in no sense ourselves or others, as if a man knows a horse more certainly than he knows himself.

Again, pluralism deserts the purpose of philosophy, which seeks one unifying principle that will integrate the cosmos into solid unity, and selects a number of principles usually in intense conflict, the ultimate results of which none can foretell. William James tells us that God is having a hard time of it and that He calls on us to help Him in the tremendous task by which He is well-nigh overwhelmed. William James even compares the creation, with which God has loaded Himself, to an avalanche which one starts down the mountain side and finds it difficult, if not impossible, to cope with in the onward sweep

that gathers force and momentum as it goes.[6] And so a finite God cries "Help! Help!" Better to have no God at all than a God like that. On this theory you have no universe. It is torn to tatters and shreds.

The defects of all these systems are evident to the thought which evaluates their reasonableness, or rather their lack of true rationality, viz., they are built on insufficient induction in too limited spheres. It is difficult to understand why anyone should undertake the rôle of philosopher, which means to interpret and unify the universe by finding its efficient cause and final purpose, and confine attention to a single department of knowledge or a slight section of the cosmos, while vast ranges of reality and numbers of valid modes of knowl-

[6] These statements are based not only on personal acquaintance and testimony but also on the published works of William James. See *A Pluralistic Universe* (New York: Longmans, Green and Company, 1909), pp. 124-25, where James says, "I believe the only God worthy of the name must be finite. . . . He works in an external environment, has limits and has enemies." See also *The Will to Believe* (New York: Longmans, Green and Company, 1897), pp. 52 ff., in which James discusses the coöperation which right living gives to the good purposes of the finite God who needs our help and coöperation and calls for it. This, in fact, is the basis of his entire volume.

edge are passed utterly by. It is as if one should investigate North Carolina and confine attention alone to the secluded mountain vales hidden away behind Mt. Mitchell and neglect entirely seashore and streams, plantations and factories, universities and philanthropic foundations. To explain adequately the cosmos we must allow all the sciences to pool all their knowledge and on this wide foundation we may then construct an ample theory or rationale of explanation, called philosophy.

3. The True Cosmical Philosophy

The true cosmical philosophy is based on a vision of the whole cosmos in all of its departments, emphasizing none to the exclusion of the others. The physical universe of glittering constellations and mighty forces and unvarying law is given "right of way" to deliver every message to which the ear of reason can attend.

Flower in the crannied wall,
I pluck you out of the crannies;
I hold you here, root and all, in my hand,
Little flower—but *if* I could understand
What you are, root and all, and all in all,
I should know what God and man is.

Every entity in the physical universe, and far more so, in the whole cosmos illuminated by natural science, testifies to the true efficient cause. "Day unto day uttereth speech and night unto night showeth knowledge. There is no speech nor language where their voice is not heard. Their line is gone out through all the earth and their words to the end of the world." Their testimony gives us a name we well know, for "the heavens declare the glory of God; and the firmament showeth his handiwork."

This system contemplates also with eager searching gaze the realm of personality, with the supreme gift of freedom, the crown of the creative process, and it knows that no interpretation of the universe can be adequate which studies gases and salts, even ions and

electrons, and which has no place for the self-determining personalism which confronts us in every human being ever brought under the eye of observation.

Nor can the true philosophic system ignore the moral ideals and values which "Jew and Gentile, Barbarian and Scythian, bond and free" have all recognized as having right to dominance and world-wide sovereignty. Some words are found in every language ever lisped by human lips, and "righteousness" is one of these inevitable products of human experience uttered in sounds which never cease to vibrate in the air.

Again, the true philosophy cannot forget that we live in a cosmos where the idea of God is the most universal, ineradicable, indestructible, persistent idea which ever challenged thought and commanded attention. Escape from it is impossible. The atheist in arguing that there is no God betrays the presence of the idea in the mind which argues and denies. One of the world's greatest thinkers said, "The invisible things of Him, from the

creation of the world are clearly seen, being understood by the things that are made, even His eternal power and Godhood."[7] The Christian philosophy embodied in its revelation rests on the ground that the wonderful universe, physical, cognitive, personal, moral, religious, philosophical requires an adequate Cause, both efficient and final Cause. Such a Cause cannot be found in a finite limited being, or entity, whatever may be the name ascribed to it, but such a Cause can be found only in an absolute and infinite person, incarnating all the supreme values of power, knowledge, wisdom, and righteousness, and His name is G-o-d—God.

The universe, physical, mental, moral, and religious, owes its origin to Him, and this is one of the central teachings of the Christian revelation. Unaided human philosophy was never quite able clearly to reach the disclosure found in the statement, "Through faith we understand that the worlds were framed by the word of God, so that things which are seen

[7] Rom. 1:20.

were not made of things which do appear."[8] Even Plato and Aristotle, who were Theists, postulated *hule*, the lowest possible grade of entity conceivable, as being eternal, and God did His best and most wondrously with *hule* in manufacturing the universe. But the biblical philosophy represents God in creation as responsible for all entity or being save Himself. Whatever creation is declared to mean, there is only one Creator who must assume sole responsibility for all other entities.

It is true there is a distinction between immediate and mediate creation found in the Christian system. Immediate creation is the origination of entities, while mediate creation or evolution or development is the use of existing entities and natural laws to bring into being other entities; as for example, "And God said let the earth bring forth grass, the herb yielding seed and the fruit tree yielding fruit, and the earth brought forth grass and herb yielding seed and fruit tree yielding fruit."[9] The cosmos thus first immediately

[8] Heb. 11:3. [9] Gen. 1:11-12.

created has the Creator ever immanent within it engaged in the vast enterprise of mediate creation. The vast creativity of God is no outworn activity but is as truly exercised today as ever before. "Creative evolution" is no barren phrase but an ever-living fact. The immanent God by sustentation and providential control is really in every being and every event in the history of His universe.

This philosophy rightly understood will satisfy science, psychology, ethics, religion, every rational demand of the highest intelligence, and it alone has the breadth which envisages the whole universe and postulates a Cause great enough to account for that universe in every phase and in all the wondrous history which has marked its development. And that Cause is an Infinite and Absolute Being, whose intelligence and power have no limits.

The universe is really unified, all the sciences or modes of human knowledge are

integrated into an organic and rational system when there is postulated as efficient and final Cause a God who is a Spirit, infinite, eternal, unchangeable, in his being, wisdom, power, holiness, justice, goodness, and truth. Reason, conscience, and heart are all satisfied with this divine philosophy.

III

THE RELATIONS OF SCIENCE AND RELIGION

THERE can be no real conflict between natural science and true religion because their spheres are entirely distinct and separate. Natural science deals with physical entities by abstraction, experiment, and mathematical measurement; while religion is an attitude of trust and love toward the infinite God, which results in a vital experience constituting the essence of religion. Conflicts between these two are always the result of misinterpretation and misrepresentation of one or the other or both, and history abounds with illustrations of all these forms of confusing contradictions.

Science and religion, while thus separate, have various interrelationships which make each the servant of the other. Dean Inge remarks "We may hope for a time when the science of a religious man will be scientific

and the religion of a scientific man religious." That day has already arrived in numerous cases.

1. The Mutual Relations of Science and Religion

First, the religious scientist will have a passion for truth, which necessitates loyalty to fact instead of theory, will construe all the processes of nature as modes of the activity of the ever-present and immanent God, and will seek to make his science the servant of God and man in all the multiform ways which the mastery of nature so certainly offers.

Second, the religious man who is scientific will see in his science an inspiration to true religion. The nature which science has so wondrously revealed in modern times declares the attributes of God with convincing clearness and consummate art. Limited power could never guide hosts of glittering constellations over untold trillions of miles, nor finite intelligence create an atom containing millions of electrons revolving myriads of times every

second around the central nucleus: the established order of nature with its fixed uniformity of law exhibits no capricious God but one so wise that He has no need to change His mind or alter His plans; the advance toward ever higher form of being with ever increasing perfection and complexity of organic relationship shows us a purposive Cause enthroned in control of every atom and force in the vast universe.

Physical science is not alone involved; psychological science, which finds created personality in the world, necessitates creative personality in the First Cause. Ethical science, discovering moral and spiritual values as real as solid mountains or mighty seas, must conclude that there are supreme and absolute values incarnate in the God who made it all. Historical science, which discovers religion in every tribe and race since time began, must find the explanation in a God capable of activity and influence and self-disclosure to hearts that trust and love Him.

In all these modes and in many others, science—all the sciences—are serving religion, and natural science may well head the august and stately procession. Drummond's *Natural Law in the Spiritual World* exhibits in a masterly way that nature abounds in parables which illustrate the deepest truths of religion, and the new science has new parables which the religious man ought to master and expound. As a slight example, think of the allotropism which shows that diamond, graphite, and charcoal are composed of exactly the same constituents in the same proportion. My distinguished teacher of chemistry used to delight in saying that milk, so pure a diet for healthy stomachs, and rattlesnake poison, so deadly a poison for all whom it infected, were composed of exactly the same elements in exactly the same proportion. What a wonderful parable illustrating that men with the same faculties, the same heredity, environment, and culture may in one case become Paul, in another, Judas Iscariot, showing that there is a force far more subtle and influen-

tial than even physical or chemical combination. Today natural science is serving religion in the minds of all who are real students of any of its branches; and every minister, above all, ought to be a master of some one department of natural science so as really to know its methods and achievements, and, as well, its necessary limitations.

2. The Key to the True Religion is Jesus

Religion is served by every branch of science rightly construed, and the God whom religion worships and enthrones is revealed in one or more of His attributes by each one of the sciences in turn, if they are all properly correlated and unified. There are various religious systems, however, and which of these does science serve? The science of comparative religion reveals partial truths in all such systems whether taught by Confucius, Buddha, or Mohammed, but the Christian religion as the final and absolute religion contains all these partial truths, plus the full-

orbed disclosure it reveals of the God of nature, philosophy, history, and now of grace and love. The God revealed by Jesus Christ in the Christian revelation has His divine attributes disclosed in every branch of true science, and no one is true master in any one of these realms unless he turns on all his studies and findings the light which shines in the face of Jesus Christ.

There can be no denial of the fact that the supreme figure in the religious history of mankind is Jesus. Dr. Broadus, one of the greatest scholars that our Southland has ever produced, used to delight in saying that the standing miracle of our world was the perfect character perfectly disclosed in the Gospels, so that everyone that will consent to look must see Him to be what He claimed to be, what He really is. A learned Jewish rabbi once asked this consummate master of common sense in religion and science both if he would recommend him some book in apologetics or the evidences of Christianity. "No," said Dr. Broadus, "for the object of apologetics is

not to convince confirmed unbelievers, but to cure the doubts of disturbed believers." "Well," said the rabbi, "have you any spiritual prescription to give me?" "Yes," was the reply, "read the Gospel of John alone with your beating heart and your God and you will see Jesus with your own spiritual eyes to be what He claimed to be: You cannot help but see it."

A famous English economist, Davidson, declares that over a century ago miners worked in the English mines, living beneath the surface of the earth all their lives. Many were born, grew up, toiled, and died without ever coming to the surface of the earth. Such were said to hear with unbelief accounts of the wondrous world above them, with glistening stars by night and a blazing sun by day lighting up the whole world. The certain prescription that would cure such doubts was to come to the earth's surface and look at the sun, and then one could be a sun skeptic no more. Really to look at Jesus as He is portrayed in the Gospel is the road to faith: the vision of

His glorious character makes doubt no longer possible.

There is only one realm where there is absolute unanimity of opinion and infidelity joins faith in declining to impeach the character of Jesus: and hell itself is as orthodox as heaven in recognizing His perfection. Hear the testimony of a few representative skeptics. Renan says, "Jesus is in every respect unique and nothing can be compared with Him. A thousand times more loving, a thousand times more loved since Thy death, than during the days of Thy course here below, Thou shalt become the corner stone of humanity, insomuch that to tear Thy name from this world would be to shake it to its very foundations. No more shall men distinguish between Thee and God."[1] John Stuart Mill asks, "Who among His disciples or among their proselytes was capable of inventing the sayings ascribed to Jesus or imagining the life and character revealed in the Gospels? Certainly not the fishermen of

[1] E. Renan, *Etudes d'histoire religieuse* (Paris: published by and for the author, 1859), p. 175.

Galilee; certainly not St. Paul, whose character and idiosyncrasies were of a totally different sort: Still less the early Christian writers."[2] Strauss affirms that "Christ is the highest object we can imagine with respect to religion, the Being without whose presence in the mind perfect piety is impossible."[3] I remark that neither Augustine, Calvin, Wesley, nor Jonathan Edwards could affirm the deity of Jesus more explicitly than the famous German author of the mythical theory, which he thus shows he did not himself really believe. Matthew Arnold tells us "try all the ways of righteousness you can think of, and you will find no way brings you to it except the way of Jesus, but this way does bring you to it."[4] Thus Arnold declares that the scientific method of experiment and observation applied to Jesus secures the result which Jesus claimed to bestow and which his disciples declare they experienced.

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[2] *Essays on Religion* (London: Longmans, Green and Company, 1885), pp. 253-54.

[3] *Life of Jesus* (People's Edition, London, 1864), p. 625.

[4] Quoted by Alexander Stewart in *Handbook of Christian Evidences* (New York: Fleming H. Revel Co., 1880), p. 139.

These quotations might be indefinitely extended, but perhaps the crowning testimony is the well-known passage from the *Emile* of Rousseau: "Shall we say that the Gospel Story is a work of imagination? Friend, this is not how one invents: the facts about Socrates, which no one doubts, are not so well attested as those about Jesus Christ. It would be more incredible that four men should have agreed to manufacture this book than that this was a single man who supplied the subject matter for it. No Jewish author could have hit upon its tone, or its morality: the Gospel has notes of reality which are so great, so striking, so absolutely inevitable that their inventor would be a more astonishing person than their hero." It may well be added that the invented characters of greatest authors have the same imperfections which mark the actual characters in authentic history. No genius has ever yet invented a perfect character. It is as easy to impeach literary portraits as it is historic personages. There is only one character and one personage whose challenge, "Which of you

convinceth me of sin?" still remains without even serious attempt to charge sin, defect, or flaw; and He is "the white and crystal Christ" of Browning. Sidney Lanier, in his beautiful poem based on Browning's designation, points out in flowing rhythm the faults of Homer, Shakespeare, Dante, Aeschylus, Aurelius, Kempis, Emerson, Tennyson, and all the other great saints, heroes, and world figures, and then breaks out in the striking declaration:

But Thee, but Thee, O Sovereign Seer of time,
But Thee, O poet's Poet, Wisdom's Tongue,
But Thee, O man's best Man, O love's best Love,
O perfect life in perfect labor writ,
O all men's Comrade, Servant, King, or Priest,
What *if* or *yet*, what mole, what flaw, what lapse,
What least defect or shadow of defect,
What rumor, tattled by an enemy,
Of inference loose, what lack of grace,
Even in torture's grasp, or sleep's, or death's,—
Oh, what amiss may I forgive in Thee,
Jesus, good Paragon, Thou Crystal Christ?

I interject here the striking testimony of pertinent witnesses said to be demons from

Gehenna who, looking upon Jesus, testified, "We know Thee who Thou art, Thou holy one, the Son of God." Thus no dissonance of contending view in heaven above or the earth beneath or hell itself distorts or destroys the universal acclaim which greets the perfection of the character of Jesus—the standing miracle of history.

Historical science has thrown into the discard heap or scrap pile the theory that this figure of Jesus was created by myth or legend or invention, and has established the full historicity of the Gospel narratives of Jesus and His disciples. One of the sanest apologetes, Dr. E. Y. Mullins in his *Freedom and Authority in Religion* demonstrates the following conclusions among others, that the Gospels of Matthew, Mark, and Luke were written between 60 and 70 A.D., that Paul's four Epistles, Romans, First and Second Corinthians, and Galatians are the oldest documents in the New Testament, having been written earlier than even Mark.[5] The historic founda-

[5] *Freedom and Authority in Religion* (Philadelphia: The Griffith and Rowland Press, 1913), *passim.*

tions of both are unquestionable. The absolute identity of Paul's interpretation of Jesus and his Gospel with Jesus' own interpretation of Himself and His Gospel can be found in the brilliant Princeton professor's convincing book, *The Origin of Paul's Religion.*[6]

The Jesus who wears these "many crowns" and who is established by the science of historical criticism as an actual historic personage cannot be ignored. In the light of all the sciences and with the highest use of reason, all thoughtful men must answer the question "What think ye of Christ?" We cannot escape this issue no matter what realm of science is our chosen pursuit. Who is this Jesus so central in the history of our world?

3. Some Proofs by Which the Science of Religion Validates the Claims of Jesus

No more momentous inquiry could engage the attention than to seek to discover what the claims of Jesus for Himself are. The self-

[6] J. G. Machen, *The Origin of Paul's Religion* (New York: The Macmillan Company, 1921), *passim.*

consciousness of the Christ is so central in the Gospels that to read them "alone with your beating heart and your God" is to discover the answer. He said, "Before Abraham was I am." "The Son of Man is the Jehovah of the Sabbath day." "Heaven and earth shall pass away but my word shall never pass away." "He that believeth on me hath everlasting life." "I have power to lay down my life and to take it again: no man taketh it from me." "Come unto me all ye that labor and are heavy laden and I will give you rest." "All authority in heaven and earth is given unto me." The same being who made these claims acted in accordance with them. He touched the leper and said, "I will. Be thou clean," and immediately his leprosy was cleansed. He laid His hands on a dear little dead girl and said "Talitha Cumi," which means "Pet lamb, get up," and at once she arose. He commanded a corpse (in spite of the protest of loving sisters who knew that nauseous, malodorous decay had begun), to come forth from the tomb; and Lazarus, de-

spite grave clothes and the iron hand of death, came walking out. Jesus talked and acted and lived and died like a God, as Rousseau said.

What did the primitive community who saw His perfect life, heard His majestic claims, and witnessed His mighty deeds really think of Him? As Dr. Patton says, "They saw Jesus, they knew Him. They left their fishing nets to follow Him. They were in daily fellowship with Him. They witnessed His crucifixion, and saw Him after His resurrection and preached that doctrine 'beginning at Jerusalem.' They did not go to a foreign land where Jesus was unknown. But in Jerusalem where some of His mighty works were done, where He was crucified, in sight of the high priest's palace and under the shadow of Pilate's judgment hall they began the work of preaching Jesus and the resurrection. Victory here was victory everywhere."[7]

As William Ellery Channing so justly said, not only the twelve apostles but the whole

[7] F. L. Patton, *Fundamental Christianity* (New York: The Macmillan Company, 1926), p. 233.

Jewish nation were put on the witness stand when Peter preached the most remarkable sermon in the world's history: "Ye men of Israel hear these words: Jesus of Nazareth, a man approved of God among us by miracles and wonders and signs, which God did by him in the midst of you, as ye yourselves also know . . . therefore let all the house of Israel know assuredly that God hath made that same Jesus whom ye have crucified both Lord and Christ."[8] Not a word of denial or protest, because "these things were not done in a corner": they knew the truth thereof. "Then they that gladly received his word were baptized: and the same day there were added unto them about three thousand souls."[9] And wherever these same truths vouched for by the science of historical criticism are proclaimed with equal fearlessness, actual results follow.

The conversion of Paul is in evidence here. A massive mind, of university training, prejudiced to the utmost against the Nazarene:

[8] Acts 2:22, 36. [9] Acts, 2:41.

there must be an explanation of the change which made this Hebrew of the Hebrews the mightiest apologete and expounder and propagator of the Christian faith. Renan suggests a "mild sunstroke" in the Syrian desert: if so God give us all mild sunstrokes. As well account for the Vatican or the Alhambra as issuing from soap-bubbles blown by infant lips.

I state without developing that prophecy will not keep quiet, as the science of biblical criticism in exegeting the Old Testament shows us. "A virgin shall conceive and bear a son and shall call his name Immanuel," [10] and the rapt seer, hundreds of years before Jesus was born, like many other brother prophets, breaks out in triumph, "Unto us a child is born, unto us a Son is given and the government shall be upon his shoulder and his name shall be called Wonderful, Counsellor, the Mighty God, the Everlasting Father, the Prince of Peace." The Old Testament Scriptures will not down. If you wish to see, read *Messianic*

[10] Isa. 7:14.

Prophecy by Charles A. Briggs,[11] as sanely balanced and as truly scientific in the realm of historical and literary criticism as Darwin's *Origin of Species* can possibly be in the realm of natural science.

I simply glance at another striking apologetic argument when I say that I wish there were some method of inducing wise and competent historical specialists to pronounce on what is really the best attested fact in human history. The resurrection of Jesus might well be a candidate for the first place. As wise a thinker as the world ever knew has affirmed that Jesus Christ has been powerfully proclaimed with a trumpet blast that circled the universe to be the Son of God by the resurrection from the dead.[12]

But it is the Jesus of Christian experience who best validates and establishes himself in the true science of religion. There is here meant the experience not of a fanatical few but of untold millions through the Christian

[11] *Messianic Prophecy* (New York: Charles Scribner's Sons, 1898).
[12] Rom. 1:4.

centuries, the experience continued today by a host of witnesses whose competency and credibility cannot well be questioned. A leading realty company in New York claims to build its business on the statement "Experience must be lived. There is no substitute for experience. And there is no substitute for the knowledge which experience brings." As Professor Albert Clarke Wyckoff so well says, "Religion's secret can be understood only by the religious man. Religious experience is a psychic entity—a concrete, natural, wholesome, positive, constructive, creative, human experience."[13] Jesus as a divine Saviour responds to human faith by giving peace and power as conscious spiritual possessions. No other religious founder ever offered them, not Mohammed, Buddha, or Confucius: and none other can bestow them, but Jesus does, as is witnessed by a vast host whom no man can number. He gives "the peace of God which passeth all understanding," the sense of adjustment to God and to all the highest

[13] *Biblical Review*, XIII (Jan. 28, 1928), 29-30.

forces in nature and in life. Then He gives the consciousness of power which integrates the personality into unity and necessitates a struggle with evil around us or within us. The great saint who interpreted himself as he once was, by saying, "The good I would I do not, and the evil which I would not that I do," now calmly claims, "I can do all things through Christ which strengtheneth me." His life shows his claim was no empty boast. With sublime humility he adds "not as though I had already attained, either were already made perfect; but one thing I do, forgetting the things which are behind and reaching forth to the things which are before, I press on. . ." This is the essence of Christian experience: we press on in the power which Jesus gives toward the goal for the "prize of the high calling of God in Christ Jesus"—Jesus and Jesus alone gives peace and power.

This experience, uniform and consistent in all true Christian believers, can have as its only explanation the truth which sheds a light on the whole universe in which we live and on

all the sciences by which we attain a valid knowledge, viz., The God who creates and rules and guides the cosmos is none other than the "God and Father of our Lord Jesus Christ."

To sum up, nature shows His attributes of power, wisdom, and purpose; and the development of physical science adds ever-increasing clearness to this demonstration. Human personality made in His image finds in the science of psychology the light of interpretation which adds lustre to the glory of the infinite and absolute Personality. Moral codes and behavior as universal as the race, find in the science of ethics, as the famous Bishop Butler says, the finger that points to the supreme moral goal from whom it all came. Religion is an undisputed human trait, for atheists are scarce and consciously insecure like Hume, who, when dying, is reported to have prayed, "O God, if there be a God, have mercy on my soul, if I have a soul": but the science of religion puts the crown where it belongs on the Head that

once was crowned with thorns but that is "crowned with glory now." Historical science testifies there is only one supreme religious figure in human history; and Christian experience confirms His claims—Jesus is and does all he claims.

The cosmos is thus unified and all the sciences integrated into an organic system, which views the universe in different aspects and studies it by different modes, but knows its one-ness in "Him who is the image of the invisible God, the first-born before the whole creation; for by him were all things created that are in heaven and on earth, visible and invisible, whether they be thrones, dominions, or principalities or powers: all things were created by him and for him: and he is before all things and by him all things consist" or cohere in unity.

Thus we know the cosmos not by one science alone, whether physical, psychological, ethical, philosophical, or religious, but combining them all we find its unity in him whose "name is above every name"—and whose attributes and perfections are shown by every science in its own order and by its own method.

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